MILLENNIUM CHALLENGE CORPORATION
UNITED STATES OF AMERICA

ARMENIA

MCC Learning from

"EVALUATION OF THE WATER-TO-MARKET ACTIVITY IN ARMENIA"

MATHEMATICA, MARCH 2013

MCC has identified the following programmatic and evaluation lessons based on the Evaluation of the Water-to-Market Activity in Armenia.

PROGRAMMATIC LESSONS

- *Always return to the program logic.* It is especially important in integrated projects that the rollout is coordinated with complementary activities. In the case of Irrigated Agriculture Project, this means the coordination of the farmer training rollout with the irrigation infrastructure activity and post-harvest marketing and access to credit components. Because the farmer training was not sequenced with the irrigation activity or completely geographically linked, assumptions around farmers' access to reliable water were not held, potentially reducing the impact of the farmer training program on behavior change. In addition, other assumptions around importance of improved access to markets (post-harvest, processing and marketing component) and access to credit through existing or new structures did not hold during the evaluation period either. Farmer training began without discreet links to buyers—marketing efforts were delayed until the third year of the compact, and the Access to Credit Sub-Sub Activity served only a small number of farmers and did not succeed in promoting additional lending to the agriculture sector.

- *Balance ambitious targets with training effectiveness.* Original targets were to train 60,000 farmers in on-farm water management, 30,000 in high-value agriculture practices and 300 enterprises with postharvest, processing and marketing support. These targets were revised to 45,000 farmers for on-farm water management training, 36,000 farmers for high-value agriculture training and 225 enterprises as a result of lessons learned during implementation, a smaller scope of the irrigation rehabilitation, currency devaluation, and the difficulty in finding 60,000 appropriate farmers and 300 enterprises to participate in training. However, the targets were still ambitious and might have resulted in a less-effective approach to farmer training, selection of participants and limited attention to the post-harvest, processing and marketing activities. More targeted and longer duration of trainings and technical support could be designed for different levels of farmers depending on their ability to adopt certain practices. The structure of the lump-sum contract with the implementer also drove the sequencing, whereby they were compensated based on meeting training targets rather being rewarded for changes in program participants' income.

- *A multifaceted development approach requires proactive and visionary management.* The Irrigated Agriculture Project suffered from poor integration of project activities and targeting of beneficiaries. Project activities were broken into several different contracts, which increased the challenge of coordination among contractors' timelines and activities. Mid-course corrections such as improvements in coordination among contractors, implementation strategy and staffing changes reduced the risks inherent in the piecemeal implementation approach, which improved implementation performance. Nonetheless, sequencing challenges compromised the original program logic.

EVALUATION LESSONS

- *The randomized roll-out evaluation approach has risks.* For the farmer training impact evaluation, the evaluators used a randomized roll-out approach in which a first round of treatment farmers is compared to a control group of farmers that received training at a later date. The key to this approach is that there is enough time between the two phases to see behavior change and the accrual of benefits for the first farmers before the second round of farmers is trained. Timelines for farmer adoption of new practices, the five-year compact timeline and inevitable implementation delays made the randomized roll-out a risky approach. In the case of Armenia, the timing was such that the on-farm water management and highvalue agriculture control group was trained before the Irrigation Infrastructure Activity was completed, thereby losing the ability to compare between the two groups once irrigation was in place. Given the loss of the counterfactual, it is not possible to estimate the causal impact of the training on outcomes with the completed irrigation infrastructure or even to allow for more crop cycles and an adjusted (more realistic) timeline for behavior change. This is a potential risk that should be considered for future impact evaluations using a randomized roll-out methodology.

- *The evaluation questions are based on the program logic and must be designed carefully from the beginning to understand the scope and limitations of the evaluation.* Given that the WTM Activity was not designed and implemented as a package of coordinated interventions for a targeted group of beneficiaries, MCC could not design an evaluation of the overall WTM Activity. The project design, implementation and the corresponding independent evaluations have limited MCC's ability to report on the overall impact of the WTM Activity. In the future, MCC should work with all stakeholders to understand the program logic, how the program will be implemented and clarify what the evaluation will be able to answer and not answer from the beginning.